

## **The Story of Heads and Tails —On a Sequentially Sensitive Lexicon\***

Shuanfan Huang  
*National Taiwan University*

This paper examines the sequential nature of the functions of lexical items, discourse markers and speech formulae. They signal relations between units of talk by virtue of their sequential position as initial or terminal brackets demarcating discourse units. Speakers of natural language have a large number of detailed expectations about how a particular routine sequence might run. Turn beginnings and turn endings are especially important since they display relevance to what has preceded and provide projections and connections for following turns. It is argued that turn-initial and turn-final markers have evolved, in response to divergent interactive forces within an ongoing discourse, a number of sharply distinct discourse functions. While the use of initial markers is connected with turn entries, turn transitions or receipt of information, the use of final markers is linked with epistemic and affective stance. Epistemic and affective stance has an especially privileged role in the constitution of social life, which accounts in part for why stance is elaborately encoded in the grammar of Chinese.

Key words: discourse unit, turn-initial, turn-final, stance

### **1. Introduction**

In an earlier paper (Huang and Chang 1997), we investigated the relation between syntactic form and the communicative function of doing question, when doing question is identified functionally and discoursally. The particular syntactic construction examined there was declarative questions. Declarative questions, unlike interrogative questions, have the form of a declarative and do not have any overt markers that identify them as questions. Their intonation is perceptually identical to that of statements. A question that was raised was how recipients of

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declarative questions recognize them as questions and why speakers choose declarative forms to do questioning. If declarative questions are formally indistinguishable from declarative statements, wouldn't there be possibility of misunderstanding? Our answer was that the interaction of morphosyntactic form and the sequential position within which the declarative questions are embedded would lead invariably to correct interpretations intended by discourse participants. Line 342 in extract (1) illustrates the use of a declarative question:

- (1) 338 F: [a] wo jiu shuo,\_  
 DM 1.SG ADV say  
 339 ...wo you bu gan chu hen dasheng,\_  
 1.SG ADV NEG dare make very loud  
 340 ..ni zhidao ma.\  
 2.SG know PART  
 341 (0)[a jiu]--  
 DM ADV  
 ⇒342 M: [a ni bushi] wuzhu dianhuatong le.\  
 DM 2.SG NEG cover receiver PART  
 343 F: ...keshi,\  
 but  
 344 ...youshihou haishi hui tingdao.\  
 sometimes still MOD hear

---

F: I said, I dared not speak too loudly, you know. [And--]

⇒ M: [Didn't you] cover the receiver?

F: But sometimes it will still be heard.

Line 342 has the syntactic form of a declarative, but the negative marker *bushi* 'not(the case)' is not used to negate the proposition of the utterance. Instead, it plays the role of a question indicator which marks the declarative clause as doing questioning. In the conversation in which line 342 was embedded, F was arguing with her roommate M about her attitude toward her ex-boyfriend. Since her ex-boyfriend was on the phone while the two were arguing, F did not dare to speak out loudly. By using a declarative clause marked by the negator *bushi*, M asks why F should worry about that since she has already covered up the receiver. M in line 342 is not saying that it is not (the case) that F covered up the receiver. Rather, she is looking for confirmation that F in fact covered up the receiver.

Declarative questions are fairly frequent, accounting for 16.72% of all the utterances which do questioning in a three hours' Mandarin Chinese Corpus (C. Chang

1977). Of special significance in the context of this paper is the observation that there maybe special affinities between ‘position’ in a turn and particular utterance type. Thus markers like *bushi* ‘not’, *suoyi* ‘therefore’ and *dengyushuo* ‘you mean that...’ occur overwhelmingly as first utterance in a turn when they are interpreted as indicators of declarative questions. Their occurrence elsewhere is doing something different when they occur. I have termed a grammar which is sensitive to sequential placement of a syntactic form a sequentially sensitive grammar. As a result of a sequentially sensitive grammar, language users are able to achieve a wide variety of communicative meaning with a relatively small set of morphosyntactic forms.

In this paper I argue that exactly the same principle applies to lexical semantics. There are lexicalized elements, including lexicalized expressions, and speech formulae whose functions are sequentially dependent and which signal relations between units of talk by virtue of their sequential position as initial or terminal brackets demarcating discourse units. Speakers of natural language have a large number of detailed expectations about how a particular routine sequence might run. Turn-beginnings and turn-endings are especially important since they display relevance to what has preceded and provide projections and connections for following turns. It is in this sense that I claim that (some part of) the lexicon is sequentially sensitive. Note, however, that when I speak of a lexicon as sequentially sensitive, I shall always mean ‘to some interesting extent’. As a result of a sequentially sensitive lexicon, the lexicon is of learnable size, and speakers are able to achieve a wide variety of communicative meaning with a relatively smaller set of lexical forms.

When we compare the way in which Chinese has grammaticized turn-beginnings and turn-endings, we see striking differences in the communicative meanings they perform. These differences can be related to the differences in their interactional functions. Thus turn-endings tend to be the locus for both the interactional function of doing questioning, which is a turn-yielding move, and the expression of affect and epistemic stance, which often signals turn-completion. Turn-beginnings, by contrast, tend to be the locus for marking turn entries (including pushes and pops), alternative choices, pre-closing statements or avoidance strategies. In general, there is a marked disjunction (i.e., dis-agreement) between linguistic strategies used for turn-beginnings and those used for turn-endings. In this paper, I will provide a functional explanation for the way Chinese has grammaticized turn-endings and turn-beginnings on the assumption patterns of language use (Schegloff 1996, Ford et al. 1996).

The organization of this paper is as follows. Sections 2-5 present the discourse function of utterance-initial *bo*; Section 6 investigates the discourse functions of a turn-final discourse marker *m*; Section 7 compares the differing functions of turn-initial and turn-final discourse markers. Section 8 is the conclusion.

## 2. Sequentially sensitive lexical items

Discourse markers function primarily to signal transition from one unit of talk to the next. Thus, for example, turn-initial *well* is a ‘response marker which anchors its user in an interaction when an upcoming contribution is not fully consonant with prior coherence options’ (Schiffrin 1987:102). Responses in question-answer and request-compliance pairs tend to be prefaced by *well* if they don’t give the expected answers as in (2), taken from Schiffrin (1987:106):

- (2) Sally: How does it work around here when somebody gets married  
t’somebody from a different group,  
like, | |Yeh. Or..yeh, =  
Zelda: |religion? |  
Sally: |=or nationality, or something. |  
Zelda: |*Well*... it-it | all depends on um...  
now my husband ... believes in eh marrying eh in his own  
religion.

Turn-initial *baituo* in (3a) is a transitive verb used to request help; in (3b), it is an intransitive used to ‘request’ the interlocutor to terminate his/her illocution. They occur in different turn-sequences and perform different types of conversational actions.

- (3) a. A: baituo ni dengyixia guolai.  
please you wait a moment come  
B: hao.  
okay
- 
- A: Please come in a moment.  
B: Okay.
- b. A: jiu zhijie di dao dishang.  
then direct drop to ground  
..na niaoniao de hua bushi  
DM pee DE NEG  
[na ruguo shuo ni shang cesuo],  
DM if DM you up restroom  
B: [aiyou baituo.]  
EX please  
..qin'ai de xiaojie.  
dear DE lady

---

A: If you have to pee, wouldn't it drop straight to the ground?  
 And if you have to go to the restroom,  
 B: My goodness, cut that off, girl.

The time adverb *taN* 'now' in Taiwanese tends to occur only in the first pair part of a question-answer pair, while other synonymous time adverbs such as *chitma* 'now' or *hianchai* 'now' have no such constraints. This means that a description of the function of *taN* must include as part of the linguistic competence of a native speaker its setting and sequential order:

(4) A: taN hai la; Beh anchoaN?  
 now bad PART want how  
 B: tan khoaN u lang lai bo.  
 wait see have people come NEG

---

A: Now (we are) in trouble; what should (we) do?  
 B: (Let's) wait and see if anyone comes by.

As another illustration of the sequentially sensitive nature of lexical expressions, consider the function of the speech formula (*goa*) *a chai* '(I) don't know' (lit. I probably know), with *goa* 'I' stressed when it is present. The setting for using this formula is one in which A (the speaker of the speech formula) and B (A's interlocutor) are talking about some event. A is asking B about the identity of someone, something or some aspect of the event, presuming that B might know about it. The function of B's utterance is to deny that s/he had such knowledge.

(5) A: in kam e lai?  
 they QP can come  
 B: goa a chai.  
 I also know

---

A: Will they come?  
 B: I don't know./How could I know?

In other words, (*goa*) *a chai* occurs only in the second pair part of a question-answer pair, unlike a synonymous expression like *goa m chai* 'I don't know', which is free to occur anywhere in a turn exchange.

A sequentially sensitive lexical element then functions both to display relevance to an earlier turn and to provide for a slot in a turn which projects that another turn of a particular kind will be forthcoming. The adjacent next turn is a basic structural position

in interaction because it is there that participants' analyses or understandings of what they took the other to be meaning are displayed. Parties to a conversational interaction have a large number of detailed expectations about how particular sequence transitions may run (like request followed by compliance followed by thanks, question followed by answer, and so on). A fine-grained analysis of types of transitions is needed if we are to have a discourse model of the functioning of sequentially sensitive lexicon which successfully discriminates between the transition markers.

Following Clark (1996), five types of transitions are distinguished, where the nature of transition from one unit of talk *s* to the next *t* depends on the relation between *s* and *t*. The job of a researcher into the nature of a sequentially sensitive lexicon would be to identify lexical resources for specifying each of the various types of transitions.

(6)

transition	description	relation
Next	enter next unit of talk	<i>t</i> is subsequent to <i>s</i>
Push	enter subunit	<i>t</i> is part of <i>s</i>
Pop	return from subunit	<i>s</i> is part of <i>t</i>
Digress	enter digression	<i>t</i> is a digression from <i>s</i>
Return	return from digression	<i>s</i> is a digression from <i>t</i>

A conversation, as in any other extended joint projects, has an entry (the preface), a body (the telling itself), and an exit (the closing section). Since conversation is a coordinate joint project, participants in a conversation require coordination and joint commitment. At no stage of a conversation can a speaker unilaterally decide to enter a conversation, or to exist from it. The body of a conversation is also a joint product since it is often shaped by both speaker and hearer in the course of a conversation. Each stage is itself complicated and can be conceived of as also having an entry-body-exit organization of its own (Clark, 1996:&&). Thus the closing section of a conversation is structured as in (7):

- (7) Entry. Terminating the last topic  
 Body. Taking leave  
 Exit. Terminating contact

The extract in (8) illustrates the often complicated nature of the closing section. U, an interior designer, is being retained to help decorate Y's new apartment. In this exchange, Y calls U on the phone for some help.

- (8) 230 Y: ho a bo chia taN mafan li.  
 okay DM BO these then trouble you
- 231 U: ho.  
 sure
- 232 <L2 hao L2>  
 okay
- 233 Y: hoN.  
 right
- 234 U: ho ho.  
 right
- 235 Y: <L2 hao L2>,  
 great
- 236 U: ho ho <E bye bye E>.  
 great
- 237 Y: <L2 xiexie L2 >.  
 thanks
- 238 Y: <E bye bye E>.
- 239 U: <E bye bye E>.

---

Y: Okay then I'm counting on your help.

U: Sure, sure.

Okay.

Y: Right?

U: Right.

Y: Great.

U: Great, bye bye.

Y: Thanks a lot.

Y: bye bye.

U: bye bye.

(M. Chang 1997:45)

If stripped off the notations for overlaps and code-switchings, the exchange would have the condensed form shown below:

- |     |   |  |
|-----|---|--|
| (9) | Y: Okay then. I'm counting on<br>your help. | <u>Turn structure</u><br>[pre-closing statement] |
|     | U: Okay hao hao.                            | [response]                                       |
|     | Y: hao.                                     | [uptake]   |
|     | U: Okay bye bye.                            | [terminal exchange]                              |

Y: Thanks a lot. bye bye. [terminal exchange]  
 U: bye bye. [terminal exchange]

Y's first utterance anchors the entry into the closing section since as soon as line 230 is uttered the substance of the talk exchange is over as the speaker Y signals his readiness to terminate the last topic. U's positive response and Y's pro-forma follow-up and the rest of the exchange constitute the body of the closing section, routine procedures for participants as they prepare themselves to take leave.

A point of special interest with respect to the extract in (8) is the observation that it is *bo* in line 230 (separately or optionally in conjunction with *ho a*) that marks the conversation's entry into the closing section, the rest of the exchange being done merely to wind up the conversation, a ritual for leave-taking. *Bo* is thus a typical discourse marker in the intended sense since it brackets the beginning of the end of a conversation. Schematically, this is shown in (10).

(10) <u>Transition</u>	<u>Marker</u>
Terminating a talk exchange (transition to the closing section)	<i>bo</i>

### 3. Discourse functions of *bo*

Aside from its historically antecedent function as a negative verb meaning 'not have', *bo* has since evolved a number of other discourse functions whose categorial statuses defy straightforward pigeonholing. Consider first *bo* as a marker of negative conditionality.

- (11) li na ki, goa toh ki; *bo* goa toh m ki.  
 you if go I then go I then not go  
 'If you go, then I'll go; otherwise I won't go.'

The second part of (11) means 'if you don't go, then I won't go', where the negative conditional reading is determined primarily by the utterance-initial *bo* since the presence of *toh* 'then' is quite optional. Both the idea of *negation* and the idea of *conditionality* have together lexicalized (i.e. routinized) into the semantics of *bo*. This means that a conditional clause is always conventionally implicated from the discourse context when utterance-initial *bo* is used.

*Bo* as a marker of negative conditionality is contingent on the inferability of *a priori* conditional clause. As the presence of a conditional clause in prior talk becomes irrelevant or more difficult to establish, the plausibility of interpreting it as

a marker of negative conditionality becomes correspondingly more tenuous. Since a conditional interpretation implicitly indicates the possibility that an alternative exists, when the speaker wants to gain entry into the topical talk but does not have a strong epistemic basis for doing so, it is no accident that *bo* is also interpretable as an alternative choice marker. This is seen in line 348 in extract (12) (adapted from M. Chang 1997:40).

(12) (M complains that fees charged for the math class at a cram school are too expensive.)

325M: poo chitle soohak toh ai chheng goa kho a.  
take oneCL math just cost thousand more dollars PART

326F: ..chitkoo gue ai chheng goa kho.  
a CL month cost thousand more dollars  
((20 IUs later))

346A:...(3.5) chit chheng kho ma siok a.  
a thousand dollars also cheap PART

347B:...(1.1) kanna poo soohak nia.  
just take math only

348A: ..a bo cho chitpai kau khuaN u khah siok.  
DM BO make oneCL pay see have COMP cheap

(Sister 2)

---

M: The math class is charging more than a thousand dollars a month.

A: Charging a thousand dollars is cheap.

M: Just the math class only.

A: Why don't you pay for the whole term and see if you get a discount.

Speaker A at line 348 means to say that *an alternative solution* is to pay for the whole term and see if M can get a discount. If *bo* is considered a marker of alternative choice rather than just a conditional marker, then we ought to expect to find utterances where a conditional clause co-occurring with a consequent clause headed by *bo* as a choice marker. This use is nicely illustrated in extract (13) below (adapted from M. Chang 1997:42).

(13) (Y calls her interior designer U and tells him about the problem with the new gate.)

225 Y: ah hele mng e hoN  
DM that door NOM PART

226 hitle hitle toamng jiplai hitle hoN,  
 thatCL thatCL gate enter thatCL PART  
 227 <L2 nage bu hao kai e L2>  
 that not easy open PART

---

Y: And that gate, it was hard to open.

((Y goes on describing the problem with the gate, which lasts for 7 IUs.))

234 U: [2 anne hioo 2]  
 PROF PART

235 [3 anne bo goa %3] theh,\_  
 then BO I take

236 Y: [3 heN 3].  
 right

237 U: theh bureka lai sau chit-e khah toa phang e.  
 take breaker come pry a little COMP large seam PART

---

U: Is that so?

Y: Right.

U: Since your gate is hard to open, I promise that I go get a breaker to pry loose the joint.

In (13) Y and U are negotiating on the phone for the achievement of Y's goal, which is for U to fix her gate. Following Y's description of where the problem is, U infers from the description and comes up with a proposal to fix the gate. The inference is marked by the conditional expression *anne* '(if) so' followed by Y's conclusion that the best alternative is as suggested in line 237. Abstractly, the exchange in (13) has the following schematic form in which U's proposal is headed by *bo* as an alternative choice marker:

(14)	<u>Turn structure</u>
Y: assessment of the situation and request for help	I
U: proposal to fix the situation	R

Structurally the conditional expression *anne* '(if) so; (given that it is) so' effectively rules out the function of *bo* as a conditional marker. Rather *bo* has been structurally integrated into the only independent clause in line 235, as it has in line 348 in extract (11). This structural reanalysis of *bo* is probably accomplished by the cognitive process of metonymic strategies which involve context-induced reinterpretation of an abstract antecedent condition for a consequent clause as a marker for a proposal. The schema of the development of *bo* is presented in (15).

(15)	Stage I.	bo,	S
		NEG.condition	consequent
	Stage II	bo,	S
		choice marker	proposal
	Stage III	[bo	S]

Pragmatically, *bo* as an alternative choice marker often occurs toward the end of an extended negotiation when one of the participants offers an alternative which then leads to the resolution of a problem and, by analogy, the ending of a talk exchange. Thus *bo* often marks also the conversation's entry into the closing section as discussed earlier in connection with extract (8). Line 216 in extract (16) below illustrates another use of *bo* as a marker of pre-closing statements.

(16) (L, a frequent caller to a call-in program, is now talking to D, the host, on the phone. In a previous conversation that lasted for quite a while, D showed his concern for L's health. In this spate of talk, L is saying goodbye to D.)

- 215 L: ho  
okay
- ⇒ 216 iah m *bo*  
DM DM BO
- 217 D: ho  
okay
- 218 [3 kamsia 3].  
thanks
- 219 L: hoo thiaNchiong khi=  
COM audience go
- 220 D: (0) ho.  
okay
- 221 L: kah kah li khaikang  
COM COM you chat
- 222 D: (0) ho ho [4<L2 xiexie xiexie L2>4]  
okay okay thanks thanks
- 223 L: [4 lan toh sieksai 4] a.  
we both familiar PART
- 224 ..ah kong khah te le hoN  
DM say COMP short PART PART
- 225 D: ho loolat loolat loolat [ho ho].  
okay endeavor endeavor endeavor okay okay
- 226 L: [oo ho]  
RT okay

(CALL IN)

L: Okay, I'll let the other callers talk with you. Since we know a lot about each other, I'll make it short.

D: Okay. Thanks for your call. Thank you very much.

Conceptually, offering an alternative choice surely differs from a proposal to end a conversation. It is clear, however, in interactive conversation, to propose to end a conversation is in effect to offer an alternative action. Thus the development of *bo* from its function as an alternative choice marker to a marker of pre-closing statements results from the mechanism of analogy linked with the cognitive process of metaphor.

Another line of development of *bo* is its use as an avoidance strategy marker. Participants engaged in conversation are expected to act with deference toward each other. One type of such strategy is what is called avoidance rituals by Goffman (1967:73), which 'take the form of proscriptions, interdictions and taboos, which imply acts the actor must refrain from doing lest he violate the right of the recipient to keep him at a distance' (cf. Clark 1996:293). Thus in extract (17) below A is trying to (appear to) avoid interfering with H's normal activity or invading her privacy. Avoidance rituals designed to maintain the participants' negative face and their freedom of action have been routinized in the semantics of *bo la*.

- (17)66 A: ng-siansin u ti le bo.  
 PN Mr. ASP be home PART BO  
 67 H: bo ti le ne.  
 NEG be home PART PART  
 68 u saN taichi hioo.  
 have what thing PART  
 => 69 A: bo la.  
 BO PART  
 70 goa si beh mng i kong goa kia e  
 I COP want ask he say I mail NOM  
 mikianN i mchai u siutioh bo.  
 things he if ASP received BO

A: Is Mr. Huang in?

H: He is not home. Is there anything I can help you with?

A: Not really. I just wanted to ask him if he has received the package I mailed him.

(Adapted from M. Chang 1997:60)

Ostensibly line 69 at the arrow appears to be A's answer to H and *bo la* appears to function as a negative verb, pure and simple. At the discourse level, however, there is something else that is going on here. Obviously, one usually calls for a purpose and A's answer at line 69 cannot be taken at face value since otherwise there would be little point for A to go on to say what he did at line 70, which shows that A indeed called B for a purpose. A talk exchange like (18) below is perfectly natural, where *bo la* is used, but there is no overt question in the prior turn for *bo la* to respond to. This is why the argument stands that *bo la* is an avoidance strategy marker rather than simply a negative verb used in response to a query. As an avoidance strategy marker, *bo la* often precedes an account of his seemingly 'intrusive' behavior and follows an earlier self-turn in which the speaker makes a query.

- (18) A: ng-siansiN u ti le bo.  
 PN Mr. ASP be home PART BO  
 H: bo ti le ne.  
 NEG be home PART PART  
 i khi kohiong au lebai chia e tnglai.  
 he go Kaosiung next week until will come back  
 A: bo la.  
 BO PART  
 goa si beh mng i kong goa kia e  
 I COP want ask he say I mail NOM  
 mikianN i mzhai u siutioh bo.  
 things he if ASP receive BO
- 

A: Is Mr. Huang home?

B: No. He went to Kaohsiung and won't be back until next week.

A: *Bo la*. I just wanted to ask him if he had received the package I mailed him.

- (19) (The daughter reminds her father F of a promise F once made. The father promised to give D more pocket money if she goes out for a run with him every early morning. F has since forgotten what he promised and responds in puzzlement.)

26F: ...goa

I

27 ... (1.1) bo a.

BO PART

- 28 ... (0.4) goa taeng siaNmi taichi.  
 I promise what thing
- 29D: .. (0.5) huN  
 EX
- 30 li koaN,  
 you look
- 31 li ko beki a la.  
 you again forget PART PART  
 ((In the intervening five IUs, D reminds her father of what he  
 promised. Seeing that D cares about nothing but money, becomes  
 infuriated.))
- 
- 36 F: <F bo a F>  
 BO PART
- 37 ... (1.0) he=  
 EX
- 38 li chit e si chaboo kuia.  
 you this NOM damn woman ghost
- 39 bo li chia a--  
 BO you this PART
- 40 li anne chiani  
 you so so
- 41 chiani gau khaichinN anne a=  
 so excel spend so PART
- (Playful brother)

F : *bo a*. What did I promise?

D: HuN! You've forgotten again.

F : *bo a*. Damn kid! You're such a spendthrift!

As a marker of puzzlement, *bo a* (occasionally just *bo*) always occur turn-initially. Its use is triggered off by what the speaker takes to be a source of perplexity. If the source of perplexity is some state of affairs in the world about him, *bo a* is likely to appear at the beginning of a conversation; elsewhere its appearance is simply conditional upon the participant's saying/doing at an earlier point in conversation.

#### 4. Sequentially sensitive nature of the discourse marker *bo*

Five types of discourse-pragmatic functions of the discourse marker *bo* have been identified: as a negative conditionality marker, an alternative choice marker, a pre-closing statement marker, an avoidance strategy marker and a puzzlement marker. Since these various uses of *bo* always occur in turn-initial position and in basically the same type of syntactic frame, it is clear that what distinguishes one function from another must be the information state of the participants and the sequential placement in a talk exchange. At the surface level, *bo* occurs in one of the following syntactic forms (u = utterance):

- (20)
- |                  |                      |
|------------------|----------------------|
| <i>bo</i> + u    |                      |
| <i>bo la</i> + u | [avoidance strategy] |
| <i>bo a</i> + u  | [puzzlement]         |

It might be argued that the form *bo la* or *bo a* is distinctive enough so that its function can be accounted for in semantic terms independently of any reference to its sequential structure, the truth is that *bo la* and *bo a* are both ambiguous. *Bo la* means either (a) not having or (b) avoidance strategy marker. It is used to mean (a) when it functions as answer in response to somebody's query, while it is used to mean (b) when the speaker is under an interactive pressure to give an account of one's seemingly 'intrusive' behavior. *Bo la* as avoidance strategy marker often occurs in a F (following-up) move of a turn structure like (21), where I (initiate) may be realized either as an inquiry or as a request made by the speaker.

- (21) Turn structure
- |   |
|---|
| I |
| R |
| F |

*Bo a* is also similarly ambiguous: (a) nothing is left or (b) as puzzlement marker. Stating the turn structure for an exchange involving the use of *bo a* as a puzzlement marker has proved a bit fussy. For one thing, *bo a*, as noted earlier, can literally start off a conversation when the speaker is puzzled by some state of affairs in the world about him. It can also be used to respond to what was said in an earlier turn. This entails breaking down a turn into its various component moves and acts. Following Stenström (1994)'s proposal, extract (19) would have the following exchange structure (cf. also Coulthard 1995):

(22)	<u>Turn</u>	<u>Move structure</u>	<u>Act structure</u>
	26–28	I	(a) <i>bo a</i> (b) query
	29–35	R	(a) booster (b) appealer (c) inform
	36–41	F/I	⇒ (a) <i>bo a</i> (b) booster (c) inform

Thus the second occurrence of *bo a* at the arrow is used to respond, in puzzlement, to what was said in (c) by another participant at the R move.

Sacks et al. (1974) have suggested that a speaker has at least three tasks to manage in a turn: to display responsiveness to the prior contexts, to make some current contribution, and to provide for some turn by another participant that should follow. Since *bo* or *bo la* always occurs before a main clause, the placement of *bo* (or *bo la* or *bo a*) earlier in a turn is a location for displaying relevance of a turn to the prior talk, and for displaying a participant's analysis or understanding of what they took the other to be meaning and doing.

As we have seen, the sequence *bo + u* can be triply ambiguous, since *bo* may be a negative conditionality marker, an alternative choice marker or a pre-closing statement marker. (23) is thus three ambiguous as indicated:

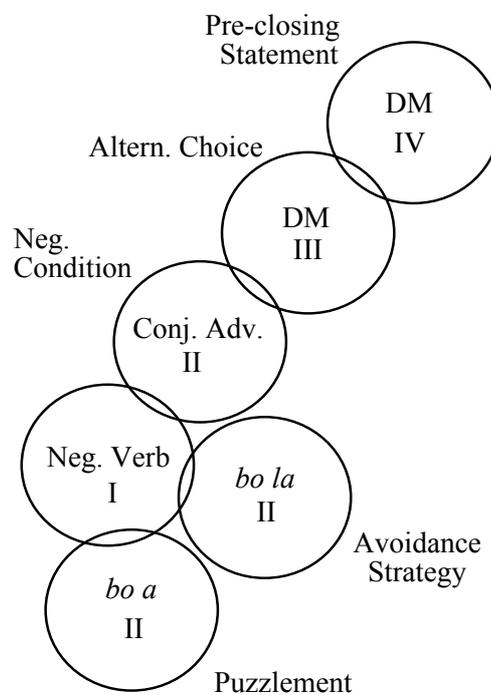
- (23) bo lan elepai      chaikian  
 BO we next week see again  
 (a) If not, let's then see each other next week.  
 (b) My proposal is: let's see each other next week.  
 (c) Well, that's it, and let's see each other next week.

A conditional reading of *bo* rides on there being another related condition in the prior talk. As inferring the presence of that earlier condition becomes impossible or even irrelevant, when sequentially speaking that condition is no longer in focus, the alternative choice reading will prevail. Finally, *bo* is interpretable as a pre-closing statement marker when the alternative choice reading works in parallel with shared perspectives of relevance for each other's actions, e.g. how the closing of an encounter is negotiated. For example, when one of the participants in a conversation begins to step back, it may be taken as an announcement of a wish for conversational closure.

## 5. Grammaticalization chains for *bo*

The development of the discourse maker *bo* from its origin as a negative verb is the result of an interaction between cognitive operations and pragmatic inferencing. This development has led to the rise of continuous linguistic structures which have been referred to as grammaticalization chains (Heine et al. 1991). A simplified schema of the grammaticalization of *bo* is presented in (24).

(24)



## 6. Turn-final discourse markers

In this section I develop an account of the discourse-pragmatic functions of utterance-final and thus frequently also turn-final discourse marker *m* in order to draw a comparison between turn-initial and turn-final discourse markers.

Turn-final *m* has evolved from what still functions as a modalized negative marker (meaning ‘will not’), and has embarked on a radically different path of grammaticalization

from that pursued by the turn-initial *bo*. It was analyzed by M. Chang (1997) variously as a question marker (when it is in the neutral tone), a confirmation marker, an inference marker and a strong assertion marker, though there was no indication of the possible interrelatedness among the functions. The challenge for an analysis of *m* is to explain its polyfunctionality. I will argue that final *m*, like turn-initial *bo*, must be interpreted as a sequentially sensitive marker whose various interpretations are jointly determined by the information states of the discourse participants and its sequential placement in discourse.

Consider first final *m*'s use as a confirmation marker. Final *m* often appears in context when, in response to a previous statement by another participant, the speaker draws some kind of inference, turns that inference from the other participant. Extract (25) is an illustration:

(25) (U, Y's interior decorator, is telling Y about a new job he is doing.)

- 307 U: hitle <L2 linsenbeilu L2>  
thatCL Linsen North Road
- 308 a kap <L2 wenzhoujie L2>  
DM and Wenchou Street
- 309 Y: ... (1.5) oo ho ho.  
DM I see
- 310 U: ..haN.  
PART
- 311 ..<L2 linsenbeilu L2> kap <L2 wenzhoujie L2> hoN  
Linsen North Road and Wenchou Street PART
- 312 he te tintang a.  
it PROG move DM
- 313 Y: ..ko sin chiap e m.  
again new undertake NOM DM
- 314 U: ..haN.  
yes
- 315 Y: sin chiap e.  
new undertake NOM

---

U: (the job) at Linsen North Road and Wenchou Street.

Y: I see.

U: Yeah. The jobs at Linsen N. Road and Wenchou Street are moving ahead.

Y: They must be new jobs, right?

U: Yeah, new jobs.

U told Y about a new job he was working on. In line 313 Y infers that it must be a new job and seeks U's confirmation. U confirms in line 314 that it is indeed a new job. The inference in line 313 is marked by final *m*.

Confirmation questions are characteristically 'talk questions' -- questions are requests for confirmation of information suggested or implied in the prior discourse, as opposed to 'external questions', questions about the external world. This means that the accessibility of information associated with a clause or clauses in the talk is likely to be a significant factor in the interpretation of final *m*. As in the interpretation of declarative questions (cf. Huang and Chang 1997), I suggest that the interpretation of final *m* as a confirmation marker is the result of applying a rule of confirmation advocated by Labov and Fanshel (1977). This rule depends on the classification of statements according to the shared knowledge of the participants. The following rule of confirmation is proposed with respect to social facts involved in an interaction between two participants A and B:

(26) Rule of Confirmation

If A makes a statement about B-events, then it is heard as a request for confirmation. Where B-events are known to B, but not to A. By contrast, A-events are known to A, but not to B; AB-events are known to both A and B, and D-events are known to be disputable.

Going back to line 313 in extract (25), Y's utterance is clearly a confirmation question, since he is here making a statement about a B-event, an event known only to U, but not to Y himself.

When the speaker's evidence for his statement is based on mutually shared knowledge, i.e. when the speaker is making a statement about an AB-event, then, by the rule of confirmation, his utterance can't be heard as a confirmation question, but only as an assertion. This is exactly the interpretation of an utterance like line 206 in extract (27):

(27) (Y was earlier thanking U for U's special discount on an interior design job with Y's new house. Then they shift their topic to Y's moving to the new house.)

202 U: a    choe    chu-iau    e.  
           DM most    essential    NOM  
 203 Y: na  
           if  
 204 U: m    toh  
           DM just

205 [2 a poaN m 2]  
       if move PART  
 206 na poaN ho [3 toh ho a m 3]  
       if move good just good PART PART  
 207 Y: [2 heN 2]  
       right  
 208 [3 heN 3]  
       right  
 209 U: haN na.  
       yes PART

---

U: The most important thing is....

U: If you have done the moving, then everything should be okay.

Y: Right, right.

U: Yeah.

In line 206, U is making a statement based more or less on a self-evident truth ('(so) if you've done the moving, then everything should be okay'). Specifically, it is not a statement about a B-event and can't thus be understood as a confirmation question. Y's use of an agreement marker ('heN') in line 209 in this stretch of talk also confirms that U intended his utterance in line 206 to be an assertion rather than a confirmation question.

When an utterance is understood as a statement about an A-event, an event known only to the speaker himself, that utterance can only be heard as an assertion. Line 210 in extract (28) is an illustration.

(28) (D is telling her friend S on the phone about how she received a visitor.)

206 D: goa hitchun lokkhi laukha.  
       I then go down downstairs  
 207 goa kiosi i bo be khilai.  
       I thought he NEG would go upstairs  
 208 goa lokkhi laukha.  
       I go down downstairs  
 209 S: [heN].  
       yeah  
 ⇒ 210 D: ho i seng peh m hoN,  
       let him save climb DM PART  
 211 S: heN heN.  
       sure sure

212 D: ..a ketko hoN i toh  
 DM turn out PART he then  
 213 i toh cho i khilai  
 he then himself climb up  
 214 goa toh anne te I aupia khilai m.  
 I just so follow he back climb up DM  
 215 S: heN.  
 okay  
 216 D: (0) hoN.  
 okay

---

206–208 D: I then went downstairs, thinking he didn't want to come upstairs.  
 209 S: Yeah.  
 210 D: (I did it) to save him the trouble of climbing up the stairs, right?  
 211 S: Sure, sure.  
 212–214 D: But he came climbing upstairs anyway.  
 215 S: Okay.  
 216 D: Okay.

We have shown that turn-final *m* appears not only in confirmation questions, namely in utterances about B-events, but also in assertions, namely statements about A-events. In what is apparently a further ‘strengthening’ of its pragmatic functions, final *m* is also found to occur in the second pair part of a question-answer pair, as exemplified in line 209 in extract (29) below.

(29) (H and Y are discussing how large a neighboring amusement park is.)

203 H: nng kah te saN kah te o.  
 two 0.97 hectare land three 0.97 hectare land PART  
 204 Y: bo la.  
 NEG PART  
 205 na u hia khoah.  
 how have that large  
 206 H: bo o.  
 NEG PART  
 207 Y: ...(1.6) khuaN u nng kah te bo.  
 see ASP two 0.97 hectare land PART

208 H: anne o.  
           so PART  
 ⇒ 209 Y: heN m.  
           RT M  
 210 ...XXX  
 211 ...(0.8) he toh khahcha <X siang X>  
                   that just before very  
 212 ... chit e chiam chiam anne nia a.  
           one NOM sharp sharp so only PART

---

H: Is the area of the land two KAHs or three KAHs?

Y: No.

How can it be that large?

H: Really?

Y: (I don't think it) is larger than two KAHs.

H: Is that so?

Y: Sure.

It was a small sharp hill before (the amusement park was built.)

(PLANE CRASH)

Y's utterance in line 209 occurs in response to a query. Ostensibly Y and H look to be arguing over a D-event (disputable event), the context suggests that Y's utterance is a statement about an A-event and is heard as such by H. Indeed Y goes on to provide further evidence in lines 211-212 for his assertion.

The emphatic assertion sense of turn-final *m* has been grammaticized in the discourse marker *mme*, an iconic form created by an emphatic release of the bilabial *m*. Line 183 in the following excerpt, which is also, as predicted, a statement about an A-event, is an example:

(30) (T and C are discussing the location of a piece of land that belong to T's family. T is not sure of the location of the land, and C tells T where it is.)  
 181 C: aloka piN-a i%--  
           PN side PART he  
 182 goakhau hit te toh lin e=  
           outside that CL just you NOM  
 ⇒ 183 hit te bo khi e toh lin e mme.  
           that CL NEG build NOM just you NOM MME  
 184 T: ah chiaN peng le.  
           DM right side PART

185 ...chiaN peng ma u [hio].  
           right side also have PART  
 186 C: [chiaN peng]  
           right side

- 
- C: The piece (of land) that is outside Aloka's house belongs to your family.  
 The piece (of land) that is left unattended is yours.  
 T: What about the right side (of the road)?  
 Is there (a piece of land that belongs to ours) on the right side (of the road)?  
 C: The right side of the road  
 ((4 IUs omitted))  
 191 C: kah khu-e kongke toh si chiaN peng he m siaN.  
           and PN-NOM share just COPright side that NEG PART
- 
- C: The land we share with the Khu family is on the right side of the road,  
 right?

We have shown then that turn-final *m* is a discourse marker whose functions are sequentially sensitive. If it occurs as a terminal right bracket in utterances about B-events, then the utterances are interpreted as confirmation questions; if it occurs in utterances about A-events, then the utterances are heard as assertions. Since whether an utterance is understood as about an A-event or B-event is strictly context-sensitive and dependent on the information states of the participants, the functions of the final *m* can't be specified in advance of its placement in a particular discourse. It is true, however, that within certain sequences, the assertion sense is so reliable that it becomes the only meaning of the construction, as in extract (28) where D, as primary speaker, completely dominates the conversation and his utterances are entirely about A-events, or in extract (29), where final *m* appears in the second pair part of a question-answer pair.

## 7. Turn-initial vs. turn-final discourse markers

We have presented in the preceding sections analyses of the functions of turn-initial marker *bo* (including *bo la*, *bo a*) and turn-final marker *m*, both of which have evolved a number of discourse functions through grammaticalization from a negative verb/modal. We have shown how they have embarked on radically different paths of grammaticalization: turn-initial *bo* functions primarily as a marker of alternative choices, pre-closing statements, or avoidance strategy, while turn-final *m* functions to mark confirmation questions or assertions, depending on the information

states of the discourse participants and sequential placement of the utterances containing the marker *m*.

We have chosen to focus on these two discourse markers advisedly, to underscore the fact that turn-beginning and turn-ending markers behave differently in their discourse pragmatics. Pending a full-blown analysis of the full complement of discourse markers, it seems clear, based on the current findings, that turn-beginning markers function to mark turn entries, transitions to discourse units (including pushes and pops), pre-closing statements, avoidance strategies or to display claims of understanding or receipt of information, or to establish coherence links, turn-final markers, on the other hand, are used to signal either (a) turn-yielding moves (e.g. question markers), (b) turn-completions (e.g. *anne*) or, more generally, (c) epistemic stance and affect. Indeed grammatical items that may be used as utterance-final elements typically include one or more of the following:

1. Questions particles and aspect markers
2. Epistemic attitudinal particles
3. Nominalizer *de*
4. Turn completers: *anne*, *zheyangzi*

These elements may be used alone or in combination to mark speaker's identity or interactional relations with speech interlocutors. A detailed analysis of the interactional significance of these elements is not possible here. Suffice it to note that where there seem to be the same discourse markers appearing in both initial and final positions, it can readily be seen that they in fact function as distinct markers. Thus while initial *anne* 'if so' marks coherence links on the ideational plane, final *anne* is used to conclude a turn-contribution. Table 1 presents the distribution of turn initial and turn final discourse markers based on a corpus of Taiwan conversations (94 minutes long and 5860 IUs. Backchannel responses are not included in the total count). 25% of the IUs are marked with a discourse marker of one form or another. It is instructive to observe that transition places between turns-at-talk (i.e. turn-final positions) are especially much more richly marked with discourse particles that project upcoming discourse units than turn-initial positions.

Table 1. Distribution of initial and final discourse markers (Time: 94'31"; IUs: 5860)

IU-initial		IU-final	
		a <sup>3</sup> (neutral tone)	158
		a <sup>7</sup>	94
a	233	a la	21
a bo	5	a hio	3
anne	21	a hoN	3
bo	8	a le	2
bo a	4	a lio	2
bo la	4	a m	2
bo le	2	a ma	7
		a oo	5
ho	10	anne	47
kong	8	anne heN	2
lang	3	anne hoN	12
o	4	anne la	11
		anne ne	1
		bo	48
		e	57
		e a	3
		e hoN	4
		e m	3
		e oo	3
		hN	2
		haN	12
		heN	10
		hoN	137
		hio	26
		kong	17
		la	212
		la hoN	17
		le	74
		le a	1
		le anne	1
		m	19
		mme	2
		ma	34
		ne	34
		oo	58
Total	302		1144

Two discourse markers stand out in particular in Table 1: turn-initial *a* and turn-final *la*. *A*, as the most frequently used initial marker, functions as a left bracket for an upcoming discourse unit and is largely used to mark turn-entries or turn claims (and secondarily to mark topic shifts). When a speaker is anxious to claim his turn, he would use *a* to attempt to preempt the current speaker's turn, resulting in pre-terminal overlap.

- (31) 48 D:    *tióngkókoe hoN,*  
          Chinese    PART  
49 S:    *hm.*  
          DM  
50 D:    (0) *ti tíngkók si    pian    póuthóngoe m.*  
          in Chinese    COP    become    putonghua    PART  
51 S:    *heN heN.*  
          DM DM  
52 D:    (0) *a    lai    taioan    ikeng--*  
          DM come Taiwan    already  
          *pian=.. pian    chítile    hoagi    ma.*  
          become    become    thisCL    Mandarin    PART

Turn-final *la* is altogether different. *La* is an epistemic attitudinal discourse particle (EA) (Huang, to appear). EAs mark simultaneously degree of epistemic commitment and the speaker's attitude toward the propositional content. They are discourse markers that grammaticalize distinctions of sentence type, evidentiality and affect. Attitude and epistemic commitment are closely interconnected and that is why it is important to recognize EA as a distinct marker type. *La*, as the most frequently used turn-final discourse marker, is used to indicate that the speaker's evidence for what he asserts is weighty, even self-evident, which, as a consequence, operates to introduce a personal overlay to a discourse and puts on record the feelings and attitudes of the speaker. The essentially discourse functions of these turn-final markers, including their epistemic commitment and affect, are generally underexplored; but they can only be effectively described with respect to their interactive force within an ongoing discourse (see Hsieh (in progress) for a more extended study).

Turn-final discourse markers, as I have shown, are, excepting question particles and TAM (tense, aspect and modality) particles, typically epistemic attitudinals. Epistemic and affective stance has an especially privileged role in the constitution of

social life, which accounts in part for why stance is elaborately encoded in the grammars of many languages, including the Chinese languages.

Evidential and other epistemic distinctions in a language are frequently bound up with its verbal morphology, especially its TAM system. In a small but instructive way, the strong epistemic attitudinal particle *la* in Table 1 is found to occur only with the perfective aspect marker *a* (forming *a la*), or the progressive aspect marker *le* (forming *le la*). That this should be the case derives in part from the observation that what has happened or is now happening has necessarily a stronger veridical force than what will happen.

## 8. Conclusion

Discourse markers are simple but elegant upshots of forward-looking utterance designs. They display relevance to what has preceded and provide projections and connections for following turns. They are at the very heart of social collaboration in talk and interaction. The use of initial markers is connected with turn entries, turn transitions, receipt of (familiar or new) information and avoidance strategies; the use of final markers is linked with epistemic and affective stance, allowing speakers to comment on particular actions or states of affairs. Adapting what Streeck (1995:109) has observed in a slightly different context, objects such as turn-beginning and turn-final discourse markers, exposed to the stormy weather of moment-to-moment interaction, acquire the precision of continuously refined exterior devices. ‘Many of the behavioral artifacts humans have created to be used in interaction are shaped in ways that enable foresight.’ (Streeck 1995:80). They pre-indicate default courses of action. This design is an imprint of a rather generic social intelligence distributed across a variety of locations: bodies, individual minds, other minds, cognitive artifacts and external memory systems. The study of discourse markers can thus be seen as providing indirect support for the situated cognition movement--a perspective that emphasized that individual minds usually operate within environments that structure, direct and support cognitive processes rather than as an abstract, detached process of logical or formal ratiocination (see Clark 1997 for a recent synthesis).

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Graduate Institute of Linguistics  
National Taiwan University  
1, Sec.4, Roosevelt Rd.  
Taipei 106, Taiwan  
sfhuang@cc.ntu.edu.tw